Amendments to the Claims

1. (Currently Amended) An interface device for communicating data using an analog exclusive line with an FXO interface, the interface device comprising:

a modem unit for modulating and demodulating data;

a memory unit in communication with the modem unit for storing an initial code and a control program for operation of the modem unit;

an impedance matching unit for matching impedance with the analog exclusive line;

an FXS signal unit for recognizing a connection request signal from the FXO interface;

a hybrid 2:4 wire conversion unit in communication with the modem unit for converting a four wire interface from the modem unit into a two wire interface for the analog exclusive line; ~~and~~

a main processor unit for providing data to the modem unit to be transmitted to the FXO interface, receiving the demodulated data from the modem unit, and controlling the operation of the modem unit and the FXS interface unit[[.]]; and

a local ring generating unit for notifying a connection request signal of the FXO interface to the modem unit from within the interface device by transmitting a ring alarm signal to the modem unit when the interface device senses the connection request signal.

2. (Original) The interface device of claim 1, wherein the FXS signal unit forms a closed circuit with the FXO interface attempting connection, and senses a connection request of the FXO interface by sensing a loop current flowing the closed circuit.

3. (Canceled)

4. (Currently Amended) The interface device of claim ~~3~~1, wherein the ring alarm signal is internally simulated by using a programmable chip.

5. (Currently Amended) An interface device for communicating data using an analog exclusive line with an FXO interface, the interface device comprising:

a modem unit for modulating and demodulating data;

an FXS signal unit for recognizing a connection request signal from the FXO interface;

a hybrid 2:4 wire conversion unit in communication with the modem unit and the FXS signal unit for converting a four wire interface from the modem unit into a two wire interface for the analog exclusive line; ~~and~~

a main processor unit for providing data to the modem unit to be transmitted to the FXO interface, receiving the demodulated data from the modem unit, and controlling the operation of the modem unit and the FXS interface unit[[.]]; and

a local ring generating unit for notifying a connection request signal of the FXO interface to the modem unit from within the interface device by transmitting a ring alarm signal to the modem unit when the interface device senses the connection request signal.

6. (Original) The interface device of claim 5, further comprising an impedance matching unit for matching impedance of the interface device with the analog exclusive line.

7. (Original) The interface device of claim 5, a memory unit in communication with the modem unit for storing an initial code and a control program for operation of the modem unit.

8. (Original) The interface device of claim 5, wherein the FXS signal unit senses an off-hook state and forming a call path to a designated device.

9. (Original) The interface device of claim 8, wherein the FXS signal unit senses a loop current to detect the off-hook state.

10. (Canceled)

11. (Original) The interface device of claim 5, wherein the ring alarm signal of the local ring generating unit is a 20 Hz signal.

12. (Original) The interface device of claim 6, wherein the FXS signal unit senses an off-hook state and forming a call path to a designated device.

13. (Original) The interface device of claim 12, wherein the FXS signal unit senses a loop current to detect the off-hook state.

14. (Canceled)

15. (Canceled)

16. (Original) A method of generating local ring in an interface device for communicating data using an analog exclusive line with an FXO interface, the interface device comprising a modem unit for modulating and demodulating data; an FXS signal unit for recognizing a connection request signal from the FXO interface; a hybrid 2:4 wire conversion unit in communication with the modem unit and the FXS signal unit for converting a four wire interface from the modem unit into a two wire interface for the analog exclusive line; and a main processor unit for providing data to the modem unit to be transmitted to the FXO interface, receiving the demodulated data from the modem unit, and controlling the operation of the modem unit and the FXS interface unit, the method comprising the steps of:

receiving a call from an external device through the analog exclusive line;

checking whether a communication line status is a cut-off status;

receiving an external clock signal from the main processor unit when the communication line status is the cut-off status;

using the external clock signal, the local ring generating unit outputs a controlled 20Hz ring signal;

providing the controlled 20Hz ring signal to the modem unit;

the modem unit generating a signal constituting an off-hook state;

detecting presence of a loop current flow; and

connecting the call.

17. (Original) The method of claim 16, wherein the memory unit storing a control program for operation of the modem unit.

18. (Original) The method of claim 16, wherein the FXS signal unit sensing the off-hook state and forming a call path to a designated device.

19. (Original) The method of claim 18, wherein the FXS signal unit sensing a loop current to detect the off-hook state.